

16. The ultrafine copper alloy wire according to claim 3, wherein said copper alloy wire has thereon a tin plating, a silver plating, a nickel plating, a tin-lead solder plating, a tin-silver plating, a tin-copper plating, a tin-silver-copper plating, or a tin-silver-copper-bismuth plating.

17. A copper alloy wire having a diameter of not more than 0.08 mm, comprising:

high-purity copper; and

at least one of (i) 1.0% to 5.0% by mass of silver, (ii) 0.1% to 0.5% by mass of magnesium, and (iii) 0.01% to 0.3% by mass of indium metal combined with the high-purity copper;

wherein prior to being combined, the high-purity copper has a total unavoidable impurity content of not more than 1.0 ppm by mass, the silver has a purity of not less than 99.99% by mass, the magnesium has a purity of not less than 99.9% by mass and the indium has a purity of not less than 99.99%.

18. A copper alloy wire according to claim 17, wherein the at least one of the silver, the magnesium and the indium is the 1.0% to 5.0% by mass of silver having a purity of not less than 99.99% by mass.

19. A copper alloy wire according to claim 17, wherein the at least one of the silver, the magnesium and the indium combined with the high-purity copper is the 0.1% to 0.5% by mass of magnesium having a purity of not less than 99.9% by mass.

20. A copper alloy wire according to claim 17, wherein the at least one of the silver, the magnesium and the indium combined with the high-purity copper is the 0.01% to 0.3% by mass of indium having a purity of not less than 99.99% by mass, combined with the high-purity copper.

21. A copper alloy wire according to claim 17, wherein the at least one of the silver, the magnesium and the indium is the 1.0% to 5.0% by mass of silver having a purity of not less than 99.99% by mass, and the 0.1% to 0.5% by mass of magnesium having a purity of not less than 99.9% by mass.

22. A copper alloy wire according to claim 17, wherein the at least one of the silver, the magnesium and the indium is the 1.0% to 5.0% by mass of silver having a purity of not less than 99.99% by mass, and the 0.01% to 0.3% by mass of indium having a purity of not less than 99.99% by mass.

23. A copper alloy wire according to claim 17, wherein the at least one of the silver, the magnesium and the indium is the 1.0% to 5.0% by mass of silver having a purity of not less than 99.99% by mass, the 0.1% to 0.5% by mass of magnesium having a purity of not less than 99.9% by mass, and the 0.01% to 0.3% by mass of indium having a purity of not less than 99.99% by mass.

24. A copper alloy wire according to claim 17, wherein the copper alloy wire is an

ultrafine copper alloy wire.

25. A copper alloy wire according to claim 17, wherein the copper alloy wire, and further comprising:

4b 3b 2b 1b } a plurality of other copper alloy wires;

wherein, the copper wire and the plurality of other copper wires form a stranded copper alloy wire conductor.

26. A copper alloy wire according to claim 25, wherein the stranded copper alloy wire conductor is one of an inner conductor and an outer conductor of an extrafine coaxial cable.

27. A copper alloy wire according to claim 26, wherein the stranded copper alloy wire conductor is the inner conductor the extrafine coaxial cable, and further comprising:

4b 3b 2b 1b } a plurality of other copper alloy wire conductors;

wherein the plurality of other copper alloy wire conductors form outer conductors the extrafine coaxial cable.--